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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/776,058 Filing Date: February 02, 2001

Appellant(s): BRANDENBERGER ET AL.

OCT 19 2006

Technology Center 2600

Michael Papalas Reg. No. 40,381 For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/13/06 appealing from the Office action mailed 3/20/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| 6683649 | Anderson | 1-2004 |
|---------|--------------|---------|
| 6137532 | Kim | 10-2000 |
| 6650361 | Shiomi | 11-2003 |
| 6167469 | Safai et al. | 9-2000 |

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 4, 5, and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, US 6,683,649, in view of Kim, US 6,137,532.

In regard to claim 1, Anderson, US 6,683,649, discloses a digital camera (see figure 1) comprising:

an optical lens system providing an optical image (see column 5, line 34), an image sensor sensing simultaneously multi-color pixel data corresponding to said optical image (see column see column 4, lines 11-14: it is inherent the senses simultaneously multi-color pixel data because the pixels are arranged in the Bayer format);

an input device (see figure 1, element 140) configured to respond to a manual input (see column 9, lines 44-46); and

a processor (see figure 1, element 116) configured to process said pixel data (see column 4, lines 18 and 19).

The Anderson reference does not disclose an input device configured to respond to a manual input selecting one of a plurality of image filters and a processor configured

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to process said pixel data in response to said selected image filter to provide filtered image data.

Kim, 6,137,532, discloses a color filter device of a digital camera which comprises an input device (see figure 2, element 222) configured to respond to a manual input selecting one of a plurality of image filters (see column 4, lines 7-10) and a processor (see figure 2, elements 211-217) configured to process said pixel data in response to said selected image filter to provide filtered image data (see column 3, lines 21-27 and column 3, line 63 to column 4, line 7: The image data processed by the color processor is used when no filtering is selected and the image data is processed by the controller (211) or processor by being replaced with the filtering effect color data when filtering is selected).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Anderson, US 6,683,649, in view of Kim, US 6,137,532 to have an input device configured to respond to a manual input selecting one of a plurality of image filters and a processor configured to process said pixel data in response to said selected image filter to provide filtered image data, in order for the user to be able to edit the image to have a selected color without the use of a color filter, thus reduces the space needed to provide several color filter options.

In regard to claim 2, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1 further comprising:

a display configured to provide a visual display of said filtered image data (see figure 2, element 140); the input device is a touch sensitive overlay provided on said display (see column 9, lines 43-46).

In regard to claim 4, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Anderson discloses wherein the image sensor is a color Charged Coupled Device array (CCD) (see column 4, lines 10-14).

In regard to claim 5, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Anderson discloses wherein the input device includes menu options (see figure 4A, element 310 and column 9, lines 44-47).

In regard to claim 7, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Kim discloses wherein a subset of said plurality of image filters are selectable by said input device and said processor is configured to provide a composite filter effect in response to selected ones of said subset (see figure 3 and column 3, lines 39-60).

In regard to claim 8, Anderson, US 6,683,649, discloses an apparatus for recording digital images (figure 1) comprising:

a graphic user interface menu (see figures 13-17) displaying a selection of an editing effect available on a digital visual recording device (see column 14, line 5+);

a processor (see figure 1, element 116) configured to perform an adjustment of the properties of said digital visual recording device (see column 5, lines 40-52); and

an image sensor (see figure 1, element 110) sensing simultaneously multicolor pixel data (see column 4, lines 12-14);

an output providing an electronic representation of the edited image (see column 9, lines 1-13).

Anderson does not disclose editing and displaying an image using digital color filtering.

Kim, 6,137,532, discloses a color filter device of a digital camera which comprises an input device (see figure 2, element 222) configured to respond to a manual input selecting one of a plurality of image filters (see column 4, lines 7-10) and a processor (see figure 2, element 214) configured to process said pixel data in response to said selected image filter to provide filtered image data (see column 3, lines 21-27).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Anderson, US 6,683,649, in view of Kim, US 6,137,532 to have a color filter device wherein a color filtering option is displayed on the GUI, the processor adjusts the images with the selected filtering, and the display displays the filtered image, in order for the user to be able to edit the image to have a selected color without the use of a color filter, thus reduces the space needed to provide several color filter options.

In regard to claim 9, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 8. Anderson discloses wherein said menu is configured to provide a hierarchical display of sad filter effects (see figures 13-17, elements 308a, b, and c).

In regard to claim 10, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 8. The Anderson reference discloses wherein said

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processor is configured to provide a preview of a filtered image (see figure 13, element 440 and 404: It is implied with the combination of Anderson and Kim will display the filtered image in window 440 when preview mode (404) is selected).

In regard to claim 11, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 8. Anderson discloses wherein said output includes a removable data storage media (see figure 1, element 122) capturing said electronic representation (see column 6, lines 20-21).

In regard to claim 12, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 8. Kim discloses wherein said filter effects include one of effects filters, technical filters, and correction filter (see column 2, lines 8-22: the color filter serves as both of or one of an effects filter and correction filter when editing the image).

In regard to claim 13, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 8. Kim discloses wherein said effect filters include variations in color intensity (column 5, lines 13-35).

In regard to claim 14, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the apparatus of claim 9. Kim discloses the processor selectively inhibits said filter effect in response to said input (see column 3, lines 28-37: when the original image signal is selected, the filtered signal is inhibited).

3. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, US 6,137,532, in view of Anderson, US 6,683,649.

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In regard to claim 15, Kim, US 6,137,532, discloses a method of combining filter effects into digital photography, said method comprising:

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selecting a first filter (see figure 3: R-Y) on a digital recording device (see column 3, lines 45-60);

selecting a second filter (see figure 3: B-Y) on a digital recording device (see column 3, lines 45-60);

combining said first filter and said second filter to create a combined filtering effect (see column 3, lines 51-60: Red green and blue are combinations of the color difference signals);

adjusting properties of said digital recording device to include combined filtering effects (see column 4, lines 1-7).

Kim does not disclose:

outputting an image on an electronic media of said digital visual recording device that includes said combined filtering effects;

recording an image on an electronic media of said digital visual recording device, which includes said combined filtering effects.

Anderson, US 6,683,649, discloses a method outputting digital photographing comprising:

outputting an image on an electronic media (see figure 1, element 140) of said digital visual recording device which has been edited (see column 9, lines 1-13) and

recording an image on an electronic media (see figure 1, element 122) of said digital visual recording device, which has been edited (see column 6, lines 51-53 and column 9, lines 1-13).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Kim, US 6,137,532, in view of Anderson, US 6,683,649, to have the color filter device in a digital camera that performs outputting an image on an electronic media of said digital visual recording device which includes said combined filtering effects and recording an image on an electronic media of said digital visual recording device which includes said combined filtering effects, in order for the user of the camera to be able to edit and view the image to have a selected color without the use of a color filter, thus reduces the space needed to provide several color filter options. Therefore, the combination of Anderson in view of Kim would provide for all the limitations of the method claimed in claim 1.

In regard to claim 16, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the digital camera of claim 15. Anderson discloses wherein said menu is configured to provide a hierarchical display of said filter effects (see figures 13-17, elements 308a, b, and c).

In regard to claim 17, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the method of claim 15. Anderson discloses wherein adjusting properties of said digital recording device includes providing a preview of said image which includes the filter effects (see figure 14, element 404 and 440: When preview (404) is selected the

edited image is displayed in the window (440), thus it is implied with the combination the filtered image can also be previewed).

In regard to claim 18, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the apparatus of claim 15. Anderson discloses wherein said output includes a removable data storage media (see figure 1, element 122) capturing said electronic representation (see column 6, lines 20-21).

In regard to claim 19, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the method of claim 15. Kim discloses wherein said filter effects include one of effects filters, technical filters, and correction filter (see column 2, lines 8-22: the color filter serves as both of or one of an effects filter and correction filter when editing the image).

In regard to claim 20, Kim, US 6,137,532, in view of Anderson, US 6,683,649, discloses the method of claim 15. Kim discloses wherein said effect filters include variations in color intensity (column 5, lines 13-35).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, US 6,683,649, in view of Kim, US 6,137,532, as described in regard to claim 1, and further in view of Shiomi, US 6,650,361.

In regard to claim 3, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Neither reference discloses the camera comprises:

an image storage configured to implement lossy compression of said filtered image data to provide compressed image data, and store said compressed image data.

Shiomi, US 6,650,361, discloses a digital camera that uses lossy compression as a compression method and then stores the image in a memory (see column 11, lines 56-58). If lossy compression is done using Discrete Cosine transform to transform and quantize image data in the respective blocks into two-dimensional frequency data, the image data volume can be greatly reduced (column 11, lines 59-65).

It would have been obvious to a person of ordinary skill in the art to have been motivated to modify Anderson, US 6,683,649, in view of Kim, US 6,137,532, and further in view of Shiomi, US 6,650,361, to use lossy compression and store the compress data in memory, in order to reduce the image data volume to be stored as taught by Shiomi.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, US 6,683,649, in view of Kim, US 6,137,532, as described in regard to claim 1, and further in view of Safai et al., US 6,167,469.

In regard to claim 6, Anderson, US 6,683,649, in view of Kim, US 6,137,532, discloses the digital camera of claim 1. Neither reference discloses a voice processor configured to respond to voice commands.

Safai et al., US 6,167,469, discloses a digital camera including a microphone and CPU that can receive voice command and voice messages (see column 6, lines 19-27).

It would have been obvious to a person skilled in the art to have been motivated to modify Anderson, US 6,683,649, in view of Kim, US 6,137,532, and further in view of

Safai et al., US 6,167,469, to have a voice processor to receive commands from the user, in order to make operation easier by allowing the user not to have to push buttons.

(10) Response to Argument

A) 1. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to modify Anderson in view of Kim to have a color filter device to process a filtered effect in the image, in order to provide the user with the added feature of being able the edit the image to the color of their choice without the use of color filters, thus reducing the space needed to provide the filtering options.

The Anderson reference discloses a digital signal processor (116) color processing of images (see column 5, lines 40-52). The Kim reference discloses a digital color filtering device for a digital camera (see column 1, lines 8-10) wherein the device comprises a digital color processor (117) for performing a color filter function (see column 2, lines 49-63). Modifying the Anderson reference to have the features of the Kim reference would not change the principle operation of Anderson, because both reference perform digital processing on the image data.

Therefore, based on the reasons stated above, it is viewed that would have been obvious to modify Anderson in view of Kim.

2. Regarding claims 1-2, 4-5, and 7, the appellant asserts that the prior art does not disclose "a processor configured to process said pixel data in response to said selected image filter to provide filtered image data."

The Kim reference discloses a color filter device that connects in parallel with a color processor (117) (see figure 2). The image data processed by the color processor (117) is used when no filtering is selected and the image data is processed by the controller (211) or processor by being replaced with the filtering effect color data (C2) selected by the user with the selection key (222) when filtering is selected (see column 3, line 63 to column 4, line 7).

Therefore, based on the reasons stated above, it is viewed that the Anderson reference in view of the Kim reference discloses "a processor configured to process said pixel data in response to said selected image filter to provide filtered image data."

Since the independent claim 1 is obvious under 35 U.S.C. 103, the applicant cannot show the dependent claims are non-obvious based on their dependency. Therefore, the claims 2, 4-5, and 7 are obvious under 35 U.S.C. 103 as stated in the rejection above.

3. Regarding claims 8-14, the applicant asserts the prior art does not disclose "performing an adjustment of the properties said digital visual recording device to include selected ones of said filter effects."

The Kim reference discloses performing an adjustment of the properties of said digital visual recording device to include selected one of said filter effects by adjusting the level of the filtered image data (see column 3, lines 21-27). It would have been obvious to one of ordinary skill of the art to configure the processor in the Anderson reference in view of Kim to have color adjustment along with the image filtering.

Therefore, based on the reasons stated above, it is viewed that the Anderson reference in view of the Kim reference discloses that "performing an adjustment of the properties said digital visual recording device to include selected ones of said filter effects."

Since the independent claim 8 is obvious under 35 U.S.C. 103, the applicant cannot show the dependent claims are non-obvious based on their dependency. Therefore, the claims 9-14 are obvious under 35 U.S.C. 103 as stated in the rejection above.

B) 1. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to modify Kim in view of Anderson to have the color filter device in a digital camera that performs outputting an image on an electronic media of said digital visual recording device which includes said combined filtering effects and recording an image on an electronic media of said digital visual recording device which includes said combined filtering effects, in order for the user of the camera to be able to edit and view the image to have a selected color without the use of a color filter, thus reduces the space needed to provide several color filter options.

The Anderson reference discloses a digital signal processor (116) for color processing images (see column 5, lines 40-52). The Kim reference discloses a digital color filtering device for a digital camera (see column 1, lines 8-10) wherein the device comprises a digital color

processor (117) for performing a color filter function (see column 2, lines 49-63). Modifying the Kim reference to have the features of the Anderson reference would not change the principle operation of Anderson, because the color sub-carrier and burst signal are not incompatible with the signals of Anderson and can be used in combination as seen in the Kim reference.

Therefore, based on the reasons stated above, it is viewed that would have been obvious to modify Kim in view of Anderson.

2. Regarding claims 15-20, the applicant asserts the prior art does not disclose "selecting a first filter and selecting a second filter."

The Kim reference discloses the same function of the color filter is performed by changing a color signal while maintaining the luminance in the video signal in its original state (see column 3, lines 40-45). The color selection key (222) allows the user to select a first filter and second filter at the same time by selecting a desired color represented in the color vector scope (see column 3, lines 45-60). Each color in the memory represents the original image data with the combined filtering effect of a first filter with a B-Y color filtering effect and a second filter with a R-Y color filtering effect (see column 3, lines 51-50).

Therefore, based on the reasons stated above, it is viewed that the Kim reference in view of the Anderson reference discloses that "selecting a first filter and selecting a second filter."

Since the independent claim 15 is obvious under 35 U.S.C. 103, the applicant cannot show the dependent claims are non-obvious based on their dependency. Therefore, the claims 16-20 are obvious under 35 U.S.C. 103 as stated in the rejection above.

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C) Since the independent claim 1 is obvious under 35 U.S.C. 103, the applicant cannot show

the dependent claims are non-obvious based on their dependency. Therefore, the claim 3 is

obvious under 35 U.S.C. 103 as stated in the rejection above.

D) Since the independent claim 1 is obvious under 35 U.S.C. 103, the applicant cannot show

the dependent claims are non-obvious based on their dependency. Therefore the claim 6 is

obvious under 35 U.S.C. 103 as stated in the rejection above.

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

gvs

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